# CHAPTER 5 Support Commands

Commands in this category carry out secondary operations, such as input/output, and defining trigonometric units. Examples of commands are READ, WRITE, and DEGREES. The commands in this category are:

## On-line help

BUGS List known bugs.

EXPERT [not working] Invoke the expert subsystem.

HELP Print (on-line) short documentation for a given command.

MAIL Print a message from the DATAPLOT service organization.

NEWS Print a description of new commands.

QUERY (or MESSAGE) [obsolete] Send a message to the DATAPLOT service organization.

STATUS Print the status of all lines, characters, variables, and

parameters.

### Input and Output (these are documented in a separate chapter)

COLUMN LIMITS Specify column limits for the READ and SERIAL READ

commands.

END OF DATA Terminate reading data.

READ Read variables.

READ FUNCTION Read one line of functions (= READ STRING).

READ PARAMETER Read parameters.

READ STRING Read one line of strings (= READ FUNCTION).

READ MATRIX Read a matrix.

ROW LIMITS Specify row limits for the READ and SERIAL READ

commands.

SERIAL READ Read variables serially.

SKIP Specify the number of header lines to skip for subsequent

READ commands.

WRITE (or PRINT) Write variables, parameters, matrices, or functions to either

the terminal or a file.

## Re-executing previous commands and terminal control

PAUSE Wait for a carriage return before continuing execution.

PROMPT Specify whether a DATAPLOT prompt is printed before

reading the next command.

REPEAT Re-execute one or more of the last 20 commands.

SAVE Save one or more listed commands.

/ Re-execute the saved commands.

## Saving, re-directing, and printing output

CAPTURE Re-direct alphanumeric output to a file.

END OF CAPTURE Re-direct alphanumeric output back to the terminal.

PP [host dependent] Send a copy of the most recent plot to the printer.

PRINTER TYPE [not working] Specify whether alphanumeric printer output is in ASCII or

Postscript format.

/ PRINTER [host dependent] Re-execute the saved commands and send the alphanumeric

output to the printer.

/ PSPRINTER [host dependent] Re-execute the saved commands and send the alphanumeric

output to a Postscript printer.

/ <file> [host dependent] Re-execute the saved commands and send the alphanumeric

output to the named file.

Listing

COLUMN RULER Prints out a column header denoting columns 1 through 80.

LIST Print the contents of a file or list the last 20 commands.

NLIST List the contents of a file with line numbers.

Feedback

ECHO Specify automatic echo of command lines (ON/OFF).

FEEDBACK Allow/suppress all feedback printing (ON/OFF).

PRINTING Allow/suppress all analysis printing (ON/OFF).

Re-initializing/exiting

EXIT Exit from DATAPLOT (synonyms are STOP, END, HALT,

QUIT, BYE).

RESET "Zero-out" all variables, parameters, functions, etc.

RESTORE MEMORY Restore all saved variables, parameters, and functions from

mass storage.

SAVE MEMORY Dump all variables, parameters, and functions to a mass

storage file.

Workspace

DIMENSION Specify the dimensions of internal data storage.

Modifying variables

APPEND Append one variable to the end of another variable.

DELETE Delete variables or elements of a variable.

EXTEND Extend one variable by attaching another variable to the end

of it.

NAME Assign (equate) additional names to variables.
RETAIN Retain variables or elements of a variable.

**Comments** 

COMMENT Insert a comment line in code. (period) Insert a comment line in code.

COMMENT CHARACTER Define the comment character for data files.

COMMENT CHECK Check data files for comment characters (ON/OFF).

Macros and programming structures

BREAK LOOP Terminate a loop before the last iteration.

CALL Execute a DATAPLOT subprogram stored in a file.

CREATE Echo DATAPLOT commands to a file.
END OF CREATE End echoing of commands to a file.

#### **Support Commands**

END OF LOOP Terminate a loop.

END OF IF

Define the end of a conditionally-executed code.

IF

Define the start of a conditionally-executed code.

LOOP Initiate a loop.

**Trigonometric units** 

ANGLE UNITS Specify which type of trigonometric units to use.

DEGREES Specify degrees for subsequent trigonometric calculations.

GRADS Specify grads for subsequent trigonometric calculations.

RADIANS Specify radians for subsequent trigonometric calculations.

Accessing internal DATAPLOT parameters

PROBE Dump the contents of an internal DATAPLOT parameter.

SET Set the contents of an internal DATAPLOT parameter.

Searching and editing files

COPY Copy all or part of one file to another file.

EDIT (or FED) Edit a file with a line mode editor.

SEARCH Search a file for the first (or all) occurrence of a string.

Defining special strings and characters

CONTINUE CHARACTER Specify the continuation character.

DEFINE Define general ASCII string commands (useful for sending

escape codes to a device). The DEFINE POSTHELP, DEFINE PREHELP, DEFINE POSTPLOT, and DEFINE PREPLOT are special cases for preceding and succeeding

strings for the HELP and PLOT commands.

SUBSTITUTE CHARACTER Specify the substitution character. TERMINATOR CHARACTER Specify the termination character.

Plot support

ANDREWS INCREMENT Specify the horizontal axis increment for the ANDREWS

PLOT command.

ANOP LIMITS Specify the upper and lower bounds for a "success" in an

ANOP plot.

CLASS LOWER Specify the class lower limit for the HISTOGRAM and

related commands.

CLASS UPPER Specify the class upper limit for the HISTOGRAM and

related commands.

CLASS WIDTH Specify the class width for the HISTOGRAM and related

commands.

COPY DELAY Specify the delay factor after a hardcopy.

CURSOR COORDINATES Specify the cursor coordinates position after a plot.

CURSOR SIZE Specify the cursor size after a plot. END OF MULTIPLOT Terminate MULTIPLOT mode.

ERASE DELAY Specify the delay factor after a screen erase.

EYE COORDINATES Specify the eye position for 3D plots.

FENCE Specify whether or not fences are drawn on box plots.

FRACTAL ITERATIONS Specify the number of points to generate for a fractal plot.

FRACTAL TYPE Specify the type of input data for a fractal plot.

HORIZONTAL SWITCH Specify whether plots are horizontaly or verticaly.

NEGATE Specify whether or not the vertical axis variable is negated.

VECTOR ARROW Specify the attributes for the arrow on a VECTOR PLOT

command.

VECTOR FORMAT Specify the data format for a VECTOR PLOT command.

Switches for analysis commands

BOOTSTRAP SAMPLE SIZE Set the sample size for subsequent bootstrap plots.

DEMODULATION FREQUENCY Specify the frequency for complex demodulation.

FILTER WIDTH Specify the filter width for SMOOTH.

FIT CONSTRAINTS [not working] Specify constraints for the FIT and PRE-FIT commands.

FIT ITERATIONS Specify the upper bound on iterations for the FIT command.

FIT POWER [not working] Specify the fit criterion power for the PRE-FIT and FIT

Specify the fit criterion power for the PRE-FIT and FIT commands.

FIT STANDARD DEVIATION Specify the lower bound on the residual standard deviation

for the FIT command.

KNOTS Specify the knots variable for the SPLINE FIT command.

LOWESS DEGREE Specifies whether the LOWESS command performs linear

or quadratic fitting.

LOWESS FRACTION Set the interval for a LOWESS SMOOTH (as a fraction).

LOWESS PERCENT Set the interval for a LOWESS SMOOTH (as a percent).

PRINCIPAL COMPONENTS TYPE Specify the type of input data for the PRINCIPAL

COMPONENTS command.

POLYNOMIAL DEGREE Specify the polynomial degree for certain variations of the

FIT, SMOOTH, and SPLINE FIT commands.

ROOT ACCURACY Specify the accuracy tolerance for the ROOTS command.

SEED Specify the seed for random number generation.

WEIGHTS Specify the weights variable for the FIT, PRE-FIT, and

related commands.

YATES PRINT Specify the printing options for the YATES ANALYSIS

command.

YATES CUTOFF Specify the convergence criterion for the YATES

ANALYSIS command.

**Host communications** 

BAUD RATE Specify the baud rate.

HOST Specify the host computer.

HOST LINK Specify the link (phone, network, etc.) to the host.

OPERATOR [not working] Send a message to the host console operator.

SYSTEM [host dependent] Send a command to the host operating system.

Miscellaneous

EXECUTE STRING [obsolete] Execute a command line with string substitutions.

IMPLEMENT [obsolete] Activate local change to the DATAPLOT implementation.

TIME [host dependent] Display the time and date.

TRANSLATE Define an automatic translation of graphic strings.